

**Amendments to the Claims:** This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. (Original) A mega-boule for use in fabricating microchannel plates (MCPs), the mega-boule comprising

a cross-sectional surface including at least first, second and third areas, each area occupying a distinct portion of the cross-sectional surface;

the first and second areas including a plurality of optical fibers, transversely oriented to the cross-sectional surface, each optical fiber having a cladding formed of non-etchable material and a core formed of etchable material; and

the third area disposed interstitially between and surrounding the first and second areas, the third area formed of non-etchable material.

2. (Currently Amended) The mega-boule of claim 21[±] further including

at least a fourth area, occupying another distinct portion of the cross-sectional surface;

the fourth area including another plurality of optical fibers of ~~substantially~~ similar materials of the optical fibers of the first and second areas; and

the third area disposed interstitially between and surrounding the first, second and fourth areas.

3. (Currently Amended) The mega-boule of claim 21[±] wherein

the etchable material of the first and second areas and the non-etchable material of the first, second and third areas are glass, and

the non-etchable material includes a higher lead content than the etchable material.

4. (Currently Amended) The mega-boule of claim 1 wherein

the non-etchable material of the third area includes a plurality of support rods transversely oriented to the cross-sectional surface, and

an optical fiber of the plurality of optical fibers and a support rod of the plurality of support rods have a cross-sectional area ~~substantially~~ similar to each other.

5. (Currently Amended) The mega-boule of claim 21[±] wherein

the non-etchable material of the third area includes a plurality of support rods transversely oriented to the cross-sectional surface, and

the optical fibers of the first area and a portion of the plurality of support rods are configured for use as an MCP.

6. (Original) The mega-boule of claim 5 wherein

the plurality of optical fibers and the plurality of support rods form a fused monolithic stack, when heated and pressed.

7. (Currently Amended) The mega-boule of claim 21[±] wherein

the plurality of optical fibers of the first and second areas form transverse microchannels in cores of the plurality of optical fibers, when the cores are etched.

8. (Currently Amended) The mega-boule of claim 21[±] wherein

the first and second areas each forms ~~one of a rectangular geometry and a circular geometry.~~

9. (Currently Amended) The mega-boule of claim 21[±] wherein

the cross-sectional surface is of a predetermined area, and

the predetermined area is based on accommodating semiconductor wafer fabrication tools.

10. (Currently Amended) The mega-boule of claim 21[±] wherein

the first and second areas each includes a size corresponding ~~substantially~~ to a size of an active region of an MCP configured as an amplifier for an image intensifier tube.

11. (Canceled)

12. (Canceled)

13. (Canceled)

14. (Canceled)

15. (Canceled)

16. (Canceled)

17. (Canceled)

18. (Canceled)

19. (Canceled)

20. (Canceled)

21. (Newly Added) The mega-boule of claim 1 wherein

the third area includes a plurality of support rods transversely oriented to the cross-sectional surface, and

the plurality of optical fibers in the first and second areas and the plurality of support rods in the third area intersect and pass through the cross-sectional surface.

22. (Newly Added) The mega-boule of claim 21 wherein

each support rod of the plurality of support rods includes an optical fiber.

23. (Newly Added) The mega-boule of claim 21 wherein

each support rod of the plurality of support rods includes an optical fiber having a cladding formed of non-etchable material and a core formed of non-etchable material.

24. (Newly Added) The mega-boule of claim 21 wherein

the first and second areas each forms a circular geometry.